

Spill Summary Report for NRC Report #1057122

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Report Date: 12/15/2015

Report Time: 2:18 PM EST

Region IV Hotline Log Entry Information

Data ID: 1442357

Date Of Report: 14-AUG-13 17:36

NRC #: 1057122

State #:

ERNS #:

Material Type: Haz

Receiver:

Material / Amount:

UNKNOWN MATERIAL (0 UNKNOWN AMOUNT);

Location:

City: VALDOSTA
County: LOWNDES
State: GA

Source of Pollution:

PERMAFIX OF SOUTH GEORGIA

Water Body:

State Or EPA Responded:

Initial EPA Action:

OSC Russell and START mobilized

Status:

2 - Closed

URL:

Associated Action Reports

DataID: 0642381

Date: 2013/08/15	Time: 09:05	Submitted by: R04 Duty Officer
Duty Officer/Responder Name: Subash Patel	NRC Report #: 1057122	Hotline Log DataID: 1442357
Action Information		
Description: Phone duty dispatched OSC Russell and START contractor to assist with aftermath of an explosion and fire at facility. Hundreds of drums, tanks, nearby Mud Creek, and a full tanker truck were impacted. Building entries will be made once fire is out and it is determined safe to enter. Perma-Fix is a TSD facility. EPA is working with GAEPD and EMA Directory at scene.		
Person Contacted		
Name: Ashley Tye Organization: EMA Directory Phone #: 2295633329		

HQ Hotline Log Entry Information

Data ID: 1442356

Date Of Report: 14-AUG-13 17:36

NRC #: 1057122

State #:

ERNS #:

Material Type:

Receiver:

Material / Amount:

UNKNOWN MATERIAL (0 UNKNOWN AMOUNT);

Location:

City: VALDOSTA
County: LOWNDES
State: GA

Source of Pollution:

PERMAFIX OF SOUTH GEORGIA

Water Body:

State Or EPA Responded:

Initial EPA Action:

Status:

URL:

NRC Spill Report

NATIONAL RESPONSE CENTER 1-800-424-8802

GOVERNMENT USE ONLYGOVERNMENT USE ONLY***

Information released to a third party shall comply with any applicable federal and/or state Freedom of Information and Privacy Laws

Incident Report # 1057122

INCIDENT DESCRIPTION

*Report taken by: RSG2992 RSG2992 at 17:36 on 14-AUG-13

Incident Type: STORAGE TANK

Incident Cause: OTHER

Affected Area:

The incident occurred on 14-AUG-13 at 14:30 local time.
Affected Medium: UNKNOWN

REPORTING PARTY

Name: KURT FOGLEMAN
Organization: PERMAFIX OF SOUTH GEORGIA
Address: 1612 JAMES P RODGERS CIRCLE
VALDOSTA, GA

PRIMARY Phone: (352)2228032

INCIDENT LOCATION

1612 JAMES P RODGERS CIRCLE County: LOWNDES

City: VALDOSTA State: GA

RELEASED MATERIAL(S)

CHRIS Code: UNK Official Material Name: UNKNOWN MATERIAL
Also Known As:
Qty Released: 0 UNKNOWN AMOUNT

DESCRIPTION OF INCIDENT

CALLER IS REPORTING THAT THERE WAS A FIRE AND AN EXPLOSION IN A STORAGE TANK WHEN MATERIALS WERE BEING MIXED. A NEARBY STORAGE ARE WITH DRUMS CONTAINING HAZARDOUS MATERIALS ALSO CAUGHT ON FIRE. THE CAUSE IS LIKELY A CHEMICAL REACTION. THE SPECIFIC MATERIALS AND AMOUNTS INVOLVED IN THE INCIDENT ARE UNKNOWN AT THIS TIME.

INCIDENT DETAILS

Description of Tank: F-3
Tank Above/Below Ground: ABOVE
Transportable Container: NO
Tank Regulated: YES
Tank Regulated By: GA EPA
Tank ID:
Capacity of Tank: 4000 GALLON(S)
Actual Amount:

IMPACT

Fire Involved: YES Fire Extinguished: NO
INJURIES: YES 3 Hospitalized: 3 Empl/Crew: Passenger:
FATALITIES: NO Empl/Crew: Passenger: Occupant:
EVACUATIONS: YES Who Evacuated: EVERYONE Radius/Area: .25 Mile(s)

Damages: NO

<u>Closure Type</u>	<u>Description of Closure</u>	<u>Hours</u>	<u>Direction of</u>
		<u>Closed</u>	<u>Closure</u>
Air:	N		
Road:	N		Major Art _N
Waterway:	N		
Track:	N		

Passengers Transferred: NO
Environmental Impact: UNKNOWN

Media Interest: LOW Community Impact due to Material:

REPORTING PARTY

Type of Organization: PRIVATE ENTERPRISE

SUSPECTED RESPONSIBLE PARTY

Name: KURT FOGLEMAN
 Organization: PERMAFIX OF SOUTH GEORGIA
 Address: 1612 JAMES P RODGERS CIRCLE
 VALDOSTA, GA
 PRIMARY Phone: (352)2228032
 Type of Organization: PRIVATE ENTERPRISE

REMEDIAL ACTIONS

POLICE AND FIRE DEPT ARE RESPONDING.
 Release Secured: UNKNOWN
 Release Rate:
 Estimated Release Duration:

WEATHER

Weather: PARTLY CLOUDY, 85o F

ADDITIONAL AGENCIES NOTIFIED

Federal: FBI, EPA
 State/Local: PD, FD, GA EPD
 State/Local On Scene: PD, FD, GA EPD
 State Agency Number:

NOTIFICATIONS BY NRC

CUSTOMS AND BORDER PROTECTION (GEORGIA COMMAND CENTER)
 14-AUG-13 17:46 (912)7214840
 CUSTOMS AND BORDER PROTECTION (GEORGIA COMMAND CENTER CON'T)
 14-AUG-13 17:46 (912)7214840
 DHS SOUTH CAROLINA FUSION CENTER (LE SENSITIVE ADVISORS & LIASON PROGRAM)
 14-AUG-13 17:46 (866)4728477
 DOT CRISIS MANAGEMENT CENTER (MAIN OFFICE)
 14-AUG-13 17:46 (202)3661863
 EPA OEM (MAIN OFFICE)
 (202)5643850
 EPA OEM (AFTER HOURS SECONDARY)
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 U.S. EPA IV (MAIN OFFICE)
 (404)6504955
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 14-AUG-13 17:46 (850)4139911
 GEORGIA EMERGENCY MNGMT AGENCY (MAIN OFFICE)

14-AUG-13 17:46 (404) 6357200
USCG DISTRICT 7 (MAIN OFFICE)
14-AUG-13 17:46 (305) 4156800

ADDITIONAL INFORMATION

*** END INCIDENT REPORT # 1057122 ***
Report any problems or Fax number changes by calling 1-800-424-8802
PLEASE VISIT OUR WEB SITE AT <http://www.nrc.uscg.mil>

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State: GA

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Water Body:

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Initial EPA Action:

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Damages: NO

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PermaFix of South Georgia
103 DX 9017.0001.0199



Rite in the Rain.

ALL-WEATHER
UNIVERSAL

Nº 371

Primary Site Manager: Paul Prys
Primary EPA Task Monitor: Chris Russell
Helen Mayoral
Bryan Vasser

1 of 1



11022316

INCH

Rite in the Rain
ALL-WEATHER WRITING PAPER



Name _____

Address _____

Phone _____

Project _____

Clear Vinyl Protective Slipcovers (Item No. 30) are available for this style of notebook.
Helps protect your notebook from wear & tear. Contact your dealer or the J. L. Darling Corporation

[illegible]

DATE _____

8/23/13

00522

LEGAL DOCUMENT
DO NOT DESTROY

² Paul Prys & Helen Mayoral

2013-0815 arrived on site at 7:45 am

Perma Fix

Gen. notes

- 55 gal. drum into a 500 gal. mixing unit - incident occurred.

- Containment wall leaked, runoff went down small "canal" to ^{tributary of} creek drainage ditch. Mud Creek

- Put out booms a little ways down from "canal" - drainage ditch

- Drainage ditch on south corner of facility

Kendrick of SWS

~~Carter~~ - believes ~20,000 gallon were pumped in the evening. Started pumping ~9:30-10:00 pm

- Objectives: use wa meter in tributary & Mud Creek, get some samples as well. Use wa meter on liquid in frack tank, hazcat & sample.

3 people injured

Scale: 1 square =

~~Mayoral~~ 8/15/2013

4769

Travis Howell - (229) 300 4769

Georgia Petroleum, Inc.

Plant Manager

His observations:

~ 2:30 pm had explosion

~ 5:00 were able to return, fire

out. ~~their~~ (Perma Fix)Saw valve open and closed it
observed a sheen.

- SWS is GA Petroleum contractor

- HEPACO is contractor for
Perma Fix.

- ATF showed up ~ 1500-1600.

- Also on scene, GA EPD Emergency
Response, Valdosta Fire Rescue
Department, Valdosta Police ^{Mobile} Command

OPI's returned to ER Van. Calibrated

YSI 556 mps (EPA # A79995)

SPEC. COND 4.49 ms/cm cal.

pH 7 7.00 (26.07°C)

837.9 mmHg pressure pH 4 4.00 (27.12°C)

ORP (30°C) 244.5 mV

DO% 100.5 % (24

Scale: 1 square = ~~1 mm~~ 08/15/2018 ^{Site in the Rain}

0940 Departed truck for sampling
& collecting samples for
hazcat.

1000 - Sample taken at ~~drainage ditch~~
dammed tributary behind
facility

Location SW of Perma fix
dammed runoff ditch/tributary

Temp: 25.16°C

S. Conductivity 0.591 mS/cm

DO % 84.8 % ~ 6"

pH 5.66 below

ORP 225.5 mV Surface

Notes: Booms with product in it on the
sides and oil pads on water
surface. Oil slick/sheen on
water surface

[Berm was breached during rain storm
overnight]

Mud Creek ^{appears to have} high concentration
of tarsins

Scale: 1 square =

[Signature] 8/15/2013

1020 location 2; ^{reading} ~~sample~~
 taken downstream of confluence
 and of tributary and Mud Creek

Temp 24.98°C

Sp. Cond 0.061 mS/cm

DO % 46.0 %

pH 4.69

ORP 207.9 mV

- Notes: Slight sheen, cloudiness
 on tributary.

1024 location 3 reading taken
 about 20' downstream of
 confluence.

Temp 24.98°C

Sp. Cond 0.061 mS/cm

DO % 46.7 %

pH 4.55

ORP 201.4 mV

* Sample taken from location 2
 at confluence of tributary
 & Mud Creek 1029

Scale: 1 square =

8/15/2013

Rite in the Rain

1035 Sec Reading taken upstream of
confluence of Mud Creek and
tributary - really dark from tannins.

Temp: ~~24.98~~ 24.98°C

Sp. Cond: 0.060 mS/cm

DO%: 41.1%

pH: 4.46

ORP: 220.7 mV

78 ^{South}
50 yards from Spur, entry to
Mud Creek (over culverts).

Met with C. Russell at 1140 to debrief
him about the results of the
water quality monitoring and assessment
of site at confluence.

Instructed to ^{get together with HEPACO} take a few samples
from the frack tank and get
readings from them, as well as
run through hazzat. (ignitability).

1150 Gave 3 16oz wide mouth clear
jars to HEPACO to fill 3/4 way with

Scale: 1 square = ~~1 square~~ *1 square* 8/15/2013

water taken
Samples from the frack tank. (HEPACO-
J.T. Cochran) Sample jars 3, 4 & 5.

OSC
1156 Instructed by C. Russell to calibrate
the AreaRAEs in case of deployment in
the near future.

~~H. Mayoral~~

Calibration

Steel RAE Unit 4, confirmed date & time

Steel RAE Unit 3, confirmed date & time

Unit 4 Steel RAE Calibration

08/15/2013 @ 1250

Mixed Air

Exp. date 10/23/2013 ^{Manuf} date 07/12 HAM-913-B

50% LEL (CH₄)

20.9% O₂

10ppm H₂S

50 ppm CO

Isobutylene

100 ppm

Exp. 10/2015

Lot LTK092-
RR-CM

Bump: _____

~~H. Mayoral 8/15/2013~~

Scale: 1 square = _____

Rite in the Rain

Unit 3 Steel RAE Calibration

8/15/2013 1305		
Mixed 10/23/13 exp. Manuf 07/12 HAM A13-B		
50% LEL %	Bump 49%	Isobutylene 100 ppm
20.9 O ₂ %	20.9 %	10/2015 Lot # LTK092-RR-CM
10 ppm H ₂ S	10 ppm	Bump: 100 ppm
50 ppm CO	50 ppm	

Unit 1 Steel RAE Calibration

8/15/2013 1305		
Mixed Exp 10/23/13 exp. Manuf 07/12 LTD 293-RR-CM		
50% Methane % (LEL)	Bump 49% LEL	Isobutylene 100 ppm
18.0% O ₂	17.9% O ₂	exp. 10/2015 Lot # LTK092-RR-CM
10 ppm H ₂ S	10 ppm H ₂ S	Bump: 101 ppm
50 ppm CO	48 ppm CO	

Last calibrated 08/02/2013

Unit 2 bump tested		Isobutylene 100 ppm
48 % LEL	cal gas 50% LEL (CH ₄)	bump test
17.8% O ₂	18.0% O ₂	96.8 ppm
9 ppm H ₂ S	10 ppm H ₂ S	
49 CO	50 CO	

8/15/2013

Scale: 1 square =

MultiRAE 095-508250 Calibration⁹

Mixed gas 8/15/2013 1440

Exp. 04/2014 Bump test

Lot#	10 ppm H ₂ S
LTD293-RR-CM	49 ppm CO
10 ppm H ₂ S	49% LEL
50 ppm CO	18% O ₂
50% LEL	
18.0% O ₂	

Isobutylene: 100 ppm

exp. date 10/2015, Lot #: LTK092-RR-CM

Bump test: 99.4 ppm

MultiRAE 095-518698/452

8/15/2013 @ 1453

Exp. 04/2014 Lot # LTD293-RR-CM

10 ppm H ₂ S	BUMP TEST	
50 ppm CO	10	Isobutylene
50% LEL	50	100 ppm
18.0% O ₂	49	exp. 10/2015
	18.0	LTK092-RR-CM
		Bump: 99.8 ppm

[Signature] 8/15/2013

Scale: 1 square = _____

Rite in the Rain

MultiRAE Pro (EPA) Unit 37

8/15/2013 1606

Mixed gas cal

10 ppm H₂S

50 ppm CO

Isobutylene 10 ppm

exp. 06/13/2013

11347 ppb

Lot #: 930871

(from truck)

MultiRAE Pro (EPA) Unit 37

8/15/2013 1606

Mixed gas exp. 03/2015

Lot #: 1472031

10 ppm H₂S

50 ppm CO

50% LEL CH₄(LEL)

18.0% O₂

Isobutylene 10 ppm

exp 06/13/2013 Lot 930871

Bump test: 11347 ppb

9.9 ppm H₂S

49 ppm CO

48% LEL

18.0% O₂

Sample 3 4417

Sample 4 26377

Sample 5 4563

Sample 3 had more sediment, 4&5 had time for the sediment to settle out.

Scale: 1 square =

8/15/2013

were pulling into tent from dammed tributary = notice more sediment in sample.

Passed

At 1655, ~~sample taken~~

At ~1500?

Sample 6

was taken from the area where the explosion took place, on the SE portion of the facility

At ~1655 Sample 7 was taken from a tanker to determine within the facility to hazard.

~1840 - took sample from the decon line ~~for~~ to test for pH, as requested by OSC C. Russell for HEPACO Captain.

1845 - requested back at 0800 next day and released from site.

19 ~~Demolition~~ Left site at 1945

Helen Mayoral

8/15/2013

Scale: 1 square = _____

Rite in the Rain

August 16, 2013

Rye, Mayoral

0750 START Rye and Mayoral on-site.

Spoke w/ OSC Russell. Will prepare AREA RAEs and multi RAEs for field use. Structural engineer on-site to ~~test~~ ^{be} for PERMAFIX to determine stability of overhead structure damaged in fire. Area located on South end of building in drum storage area.

0900 START Mayoral began bump testing AREA RAEs and multi RAEs. START Rye will replace the CO and H₂S sensors with HCN and Cl₂ sensors in units AREA RAE 3 (A80780) and AREA RAE 1 (A80782) ~~(A80781)~~

0915 Bump tested AREA RAEs

Mixed, exp. 03/2015, Lot #: 1472631

Isobutylene, 100 ppm, exp. 10/2015, LTK092-RR-CM

	UNIT 1	UNIT 2	UNIT 3	UNIT 4
50 ppm CO	42 ppm	62 ppm	49 ppm	46 ppm
100 ppm VOC	101 ppm	97.3 ppm	100 ppm	101 ppm
10 ppm H ₂ S	9 ppm	9 ppm	9 ppm	9 ppm
50% LEL	48%	48%	53%	49%
18.0% O ₂	18.3%	18.0%	17.5%	17.5%

A80782 A80779 A80780 A80781

Scale: 1 square =

~~Mayoral~~ 8/16/2013

Recalibrated Unit 2, A 80779 using same mixed cal gas as previous bump.

Mixed, exp 3/2015, Lot #: 1472031		
50 ppm CO	50 ppm CO	Isobutylene 100 ppm
100 ppm H ₂ S	10 ppm H ₂ S	exp. 10/2015
50% LEL	49 % LEL	Lot #:
18.0% O ₂	18.0 % O ₂	LTK092-RR-CM
Bump 5		Bump: 100 ppm

1000 MultiRAE Bump Test 1000

Mixed, exp. 03/2015, Lot # 1472031

Isobutylene 100 ppm, exp. 10/2015, Lot: LTK092-RR-CM

UNIT #1		
	508250	518698
50 ppm CO	48 ppm	48 ppm
10 ppm H ₂ S	10	11 ppm
50% LEL	51 %	50%
18.0% O ₂	17.9%	17.9%
100 ppm VOC	100 ppm	100 ppm

1100 Prys, ^{prepared to} entered facility with Valdosta Fire Department, ATF, and members of HEPACO

1115 Entered facility

1120 Mayoral tasked to get TWA 1000 FID up and calibrated.

Helen Mayoral 8/16/2013

Scale: 1 square = _____

Rite in the Rain

1135 Mayoral began calibration
of AreaRAE #3 & #1 for

HCN & Cl₂ sensors, while TVA warmed up.

HCN cal gas: Exp. 11/2013, Lot #: 3-B93-732

Cl₂ cal gas: exp. 10/31/2013, Lot #: D211125 ^{Batch #:} SN: PDI 34897

	^{Bump} Unit 1	^{Bump} Unit 3
10ppm HCN	10ppm	9 ppm
10ppm Cl ₂	Not collected	Not collected

1200 START PAGE RETURNED TO RESPONSE
TRUCK. ASSISTED START MAYORAL WITH
TVA 1000 CALIBRATION.

1225 START PAGE RE-ENTERED FACILITY TO
CONDUCT AIR MONITORING AND ESCORT
OSHA, GA EPD, AND PERMA-FLEX
INSURANCE ADJUSTERS. START MAYORAL
CALIBRATED TVA 1000 AND CONTINUED
UPLOADING PHOTOS TO EPA OSC WEBSITE.
START PAGE MONITORED AIR USING
MULTI-RAE PLUS (#095-508250).

BREATHING ZONE MONITORING RANGED
FROM 0.4 - 13.2 ppm. LATE NOTE:

AIR MONITORING DURING PREVIOUS ENTRY
RANGED FROM 0.4 - 18 ppm. AIR
MONITORING IN MIXING UNIT (POINT
WHERE DRUMS ARE EMPTIED INTO UNIT)

Scale: 1 square =

[Signature] 8/16/2013

August 16, 2013

Phys, mayoral

1225 resulted in a VOC range of 2.1 - 9.0 ppm with a spike of 45 ppm. VOCs were monitored during both entries. CO, N_2S , and LEL were ϕ and O_2 was 20.9% during both entries. START Phys collected a sample from the mixing unit using a boiler. Sample requested for HAZMAT at request of ATF.

1330 START Phys returned to response truck. Assisted START mayoral with calibrating/troubleshooting AREA RAE Cl_2 sensor. OSC Russell arrived to truck and START updated him on-site activities. Contacted QSI Proctor with troubleshooting Cl_2 sensor. Calibrated AREA RAE units 1 and 3.

1400 A track hoe with a thumb attachment arrived on-site for NEPALCO. NEPALCO will use a shear and the track hoe to remove the damaged structural debris so personnel can work safely. ~~STPP~~ Shear to be on-site morning of 8/17/13.

Scale: 1 square

mayoral 8/16/2013

Rite in the Rain

August 16, 2013

Phys, Mayra

1500 Updated logbook and continued updating photos on EPA OSC website.

~~1545 OSC Russell dismissed~~ (EP)

1600 ~~1550~~ BEGAN NAZCAT ON SAMPLE FROM mixing unit. OSC Russell informed START NAZCAT OF OTHER SAMPLES FROM FRAG TANKS NOT NECESSARY SINCE HEPALO SENT SAMPLES OFF FOR ANALYSIS.

1645 OSC Russell dismissed START FOR THE DAY. START PACKED UP EQUIPMENT.

1730 START OFF-SITE.

Bob
16 AUG 2013

Scale: 1 square = _____

August 17, 2013

Pags, Mayoral

0700 START Pags AND MAYORAL on-site.

Spoke with OSC Russell. Tasked

to deploy AREA RAES 1+3 and to

put Cl₂ and HCN sensors in AREA RAES 2+4.

0820 START MAYORAL conducted bump

test on AREA RAES 1+3. START Pags

AND OSC RUSSELL walked the site to

look for monitoring locations.

Bump test on Steel AREA RAES

Mixed gas exp. 7/2015. Lot # 1472031

Isobutylene 100ppm. exp date 10/2015. Lot # LTK092-RR-CM

	Unit 1	Unit 2	Unit 3	Unit 4
100 ppm VOC	100 ppm	99 ppm	100 ppm	99 ppm
50% LEL	48%	47%	52%	48%
18.0% O ₂	18.0%	18.0%	18.0%	17.5%
10 ppm Cl ₂	9.8 ppm		10.1 ppm	
10 ppm HCN	11 ppm	9 ppm	10 ppm	10 ppm

(FF)

0845 START Pags INSTALLED Cl₂ AND HCN

SENSORS IN AREA RAES 4. Turned unit on

to warm sensors.

0930 START Pags AND MAYORAL deployed units

1+3 on-site. Unit 1 was hung on the

Scale: 1 square =

~~Handwritten signature~~ 8/17/2013 in the Rain

0920 FENCE NEAR THE "NO SMOKING" SIGN
located along the EAST SIDE of the south
wall on the BA Petroleum side of the
fence. Unit 3 was hung on the south
side of a trailer (blue) located on
the east side of damaged drum
storage area. ~~SM~~

0945 START Pags installed the Cl_2 and HCN
sensors on AREA 2. START mayoral
calibrated AREA 4

Calibration of HCN & Cl_2 sensors on Unit 2 &
Unit 4 using 10 ppm HCN cal gas, exp. 11/2013,
Lot #: 3-093-732; using Cl_2 cal gas,
exp. 10/31/2013, Batch #: 0211125

Bump test results are listed in Table
on page 17. Chlorine sensors were not
bump tested to conserve low cal gas.

10:15
1020: Unit 4 ~~was calibrated~~ SM deployed
along yellow metal platform on NW
corner of damaged drum storage
area.

1045 Unit 2 HCN & Cl_2 sensors were
calibrated by START Mayoral.

10 ppm HCN cal gas, exp. 11/2013, lot 3-093-732

Scale: 1 square = ~~1 square~~ 8/15/2013

10 ppm Cl_2 cal gas, exp. 10/31/2013, Batch #211125
Bump test for HCN recorded on Table on page

17. Cl_2 sensor was not bump tested to
conserve on low cal gas.

Radio button on Unit 2 was on during
calibration and may have been
recorded on data log.

1110-1115 Unit START Prys and Mayoral
deployed Unit 2. Unit 2 was placed
about 20 feet north of the damaged
drum storage area on the north
side of the silver storage tanker
trailer.

1140 START Mayoral took inventory of cal
gases. START Prys updated OSC
Russell on status of gases, and
discussed personnel support.
OSC Russell decided only one START
was required for site support.
START Prys and Mayoral will
demobilize from site at ~~1600~~ 1600
today and be replaced by START
Vasser.

Mayoral 8/17/2013

Scale: 1 square = _____

Rite in the Rain

8-17-13

- 1300 - Image added to ProRAE Remote for better visualization of air monitoring sites that were deployed along the perimeter and within the facility.
- 1425 - Instructed to change lower alarm limits on the AreaRAEs for VOCs from 5.0 ppm to 50 ppm, by OSC Russell.
- 1500 AreaRAE Host and generator were moved from the response truck to the guard house in front of the facility. There were no issues during the transition.
- START Prys documented the crushing of drums by HEPACO staff.
- 1525 START Prys and Mayoral began packing up response truck.
- 1600 Demobilized from site to transition with START Vasser for personnel change.
- 1930 START Vasser arrives at site and completes a site walk with OSC Russell
- 2015 Demobilize from Site.

Dayan Vasser
8-17-13

Scale: 1 square = _____

8-18-13

0745 Arrive on site and begin bump testing Area Raes.

Unit 4 displayed lamp issues yesterday but cleared out this morning.

Unit 3 was exposed to heavy rain yesterday and did not start up properly. Unit 3 has water inside and was put outside to dry.

0855 Unit 1, 2, 4 pass bump tests/calibrations and are deployed

1000 - Attend Ops meeting

Goal for today is to remove the roof over the receiving area and evaluate unopened drums. Also one drum of concern was identified based on manifests. It contains 4 smaller containers of methyl isocyanate.

1430 Hepaco completes removal of roof

1602 Hepaco enters to evaluate drums in receiving area.

1435 Entry complete and team exits through decon.

1440 Rain begins to move in so Area Raes

Scale: 1 square =

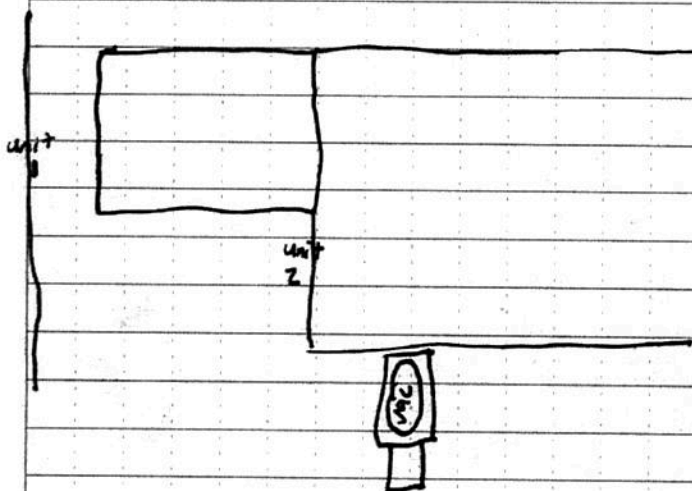
~~Bayer/Hansen~~ Pitt in the Rain

8-18-13

8-18-13

are taken down.

1700 Ops meeting

Area Rec Locations for the day
unit 3

Approximately 15 drums were identified during entry. Goal for rest of afternoon is to crush empty drums and begin opening drums with contents.

1936 Demobilize from site to hotel

~~Page/Name~~ 8-18-13

Scale: 1 square = _____

8-19-13

0740 START arrives at site and begins calibrating 3 Area Racs, 1 MultiRac, and TVA-1000.

Unit #	HCN	VOL	Leak test	Cl ₂
Area Rac 1				
Area Rac 2				
Area Rac 3/4				
MultiRac				
TVA 1000 - Methane -				

0815 Area Racs placed around receiving area pad

0902 Hepco punches a hole in the suspected isocyanate drum to release any potential pressure

0915 Hepco made entry to evaluate and overpack the suspected isocyanate drum. Hepco confirmed the contents of the drum appeared to match the inventory contents. Hepco overpacks the drum. EPA collects sample from the drum with several ruptured glass containers.

1000 OSC attends Ops meeting

Ray V. 8-19-13

Scale: 1 square = _____

Rain in the Rain

8-15-13

1000 START attempts to run sample on HachMat ID. No library match. Drop of sample in water sinks but after shaking leaves a milky solution. After completing cyanide test, negative result. Upon comparing FTIR spectrum to Chlordane shows many similarities but is not an exact match.

1215 START collects water quality parameters.

Temp = 32.06 °C	Cond = 8.54 nS/cm
-----------------	-------------------

DO% = 18%	pH = 7.06
-----------	-----------

ORP = 135	FID = 10 ppm
-----------	--------------

WQP collected from tertiary containment area.

1300 Georgia Power begins working to restore power to Georgia Petroleum.

1730 Georgia Power completes work on-site.

1820 START departs site and refills gas tank and gas can.

Page 1/1

8-19-13

8-20-13

25

0732 START arrives on site and begins preparing Area Raes and multiRaes.

Unit	HCV	VOL
AR1	calcd 10	calcd 100
AR2	calcd 10	calcd 100
AR4	bump 10	calcd 100
MR	bump 10	bump 101

0830 Hepco begins staging drums on receiving pad for popping and sampling

0912 Hepco begins Level B entry to collect samples for Haz Cat

0955 START begins running samples on Haz Mat ID

Drum Result

1	Ammonium Chloride	10	oil
2	Oil/Water mix	11	oil/solvent mix
3	Solid-Sandblast Media ^{or}	12	Solid-SBM
4	Solid-Sandblast Media	13	Solid-SBM
5	Solid-SBM	14	Latex paint
6	Solid-SBM	15	solid-clay
7	Solid-SBM	16	3-Hepco-oil
8	Resin		yeast
9	oil	17	pesticide - (chlorpyrifos)

Scale: 1 square =

Approx

8-20-13

Site in the Rain

8-20-13

- 11:30 Attend Ops meeting
- 12:00 Attend waste disposal meeting
- 13:00 Hepaco collects 2 samples from secondary containment for bench testing. START assists Hepaco with bench test for compatibility of drums from receiving area and secondary containment liquids. Drums 1, 2, 3, 8, 9, 10, 11, 14, 15; Receiving Pad liquids and secondary containment liquids were combined in small scale. No reactions were observed. RPID noted no readings FIP = 14 ppm max.
- 17:00 Ops meeting
 CTEH will be coming in Wednesday afternoon or Thursday morning
 Sludge can be solidified. Sludge should be sampled beforehand and a bench scale test with fly ash will be conducted.
- 19:00 START departs site following a survey with the TUA. Area Re
 $VOL_s = 0$ TUA = 20+ ppm

Scale: 1 square =

ppm Vol 8-20-13

8-21-13

- 0730 START arrives on site and
calibrates analyzers
- 0800 START places Area Raes around
the receiving area pad.
- 0815 Hepaco makes entry to overpack
Chloroform drums located in secondary
containment and relatively intact with
legible labels.
Night operations removed most liquid,
debris, and some sludge from receiving
area pad. Those cleaning operations will
continue after the chloroform drums
are overpacked.
- 0930 EPA and START observe sheen
in the tertiary clarifier and ask
RP to place foam at the drain
prior to release. Start collects
WQ parameters
Temp - 27.9°C DO - 28.5%
pH - 7.3 Cond - .405
ORP - 141
- 1000 Attend START ^{BU} meeting ops meeting

~~Page 10/11 8-21-13~~

Scale: 1 square = _____

Rite in the Rain

8-21-13

Containers

1000 - 1199 drums impacted

1030 Hepco continues cleaning receiving area pad and crushing drums in secondary containment. Hepco also begins moving drums from secondary containment to roll offs.

1530 EPA takes down Area Raes due to impending rain. The PID is not getting readings but FID's are so EPA Area Raes will not be set up after the rain.

1700 Attend Ops meeting

1730 Screen receiving pad with FID and discuss monitoring operations with CTEH. FID readings continue to decrease on the pad as they pressure wash. Earlier in the day max of 100 ppm currently max ~ 40 ppm

1845 Screen pad max ~ 20 ppm

2000 START departs site Hepco remains working on decon of the receiving area

Scale: 1 square =

8-21-13

8-22-13

29

- 0800 START arrives at site and begins site work.
- 0840 Discuss operations with Hepaco HHS and learn the pad is currently reading avg ~5 ppm max ~10 ppm. Weather is rainy this morning.
- 1000 Attend Ops Meeting.
- 1115 START and Hepaco complete a beach ^{soil} ~~test~~ compatibility test using a 5-pt composite of sludge and liquid from secondary containment and fly ash on site. Note no temperature change $> 2^{\circ}\text{F}$ and a rise in FID readings during mixing but not in resting state.
- LTEH has 3 Area Raes on South fence line and is making regular surveys with the TVA during site activities.
- 1230 Hepaco begins sheering the roof over secondary containment to open reach to more drums.

~~Page 1 of 1~~ 8-22-13

Scale: 1 square = _____

Rite in the Rain

8-22-13

1706 Attend Ops meeting.

State requests a memo from Penafix describing the compatibility test similar to what is described in their permit.

1745 START and Hopaco provide technical support to redo the test.

Initial temp - 72°F Initial VOC - 200-500 ppm

Mixing temp - 76°F Mixing VOC - 3000 ppm

post Mixing temp - 73°F post Mixing VOC - 200-500 ppm

Penafix will prepare a memorandum or checklist describing the results

1800 High Vapor levels are noted throughout the work area when measuring with FID.

The vent of the Vac truck is emitting >500 ppm within 10 ft of vent.

Downwind of Vetract >50 ppm beyond SE corner of building.

At secondary containment wall = >50 ppm

In excavator ~2-6 ppm during mixing

2000 START departs site

~~Angela Vasan~~

8-22-13

Scale: 1 square = _____

8-23-13

0700 START fills gas of truck on way to site.

0705 START arrives at site. Take FID around site. SW corner of containment is approximately 150 ppm. Hepaco will establish Level 1 exclusion zones and try to exhaust Vac truck vent higher into the air to avoid accumulating on site.

1000 Attend ops meeting

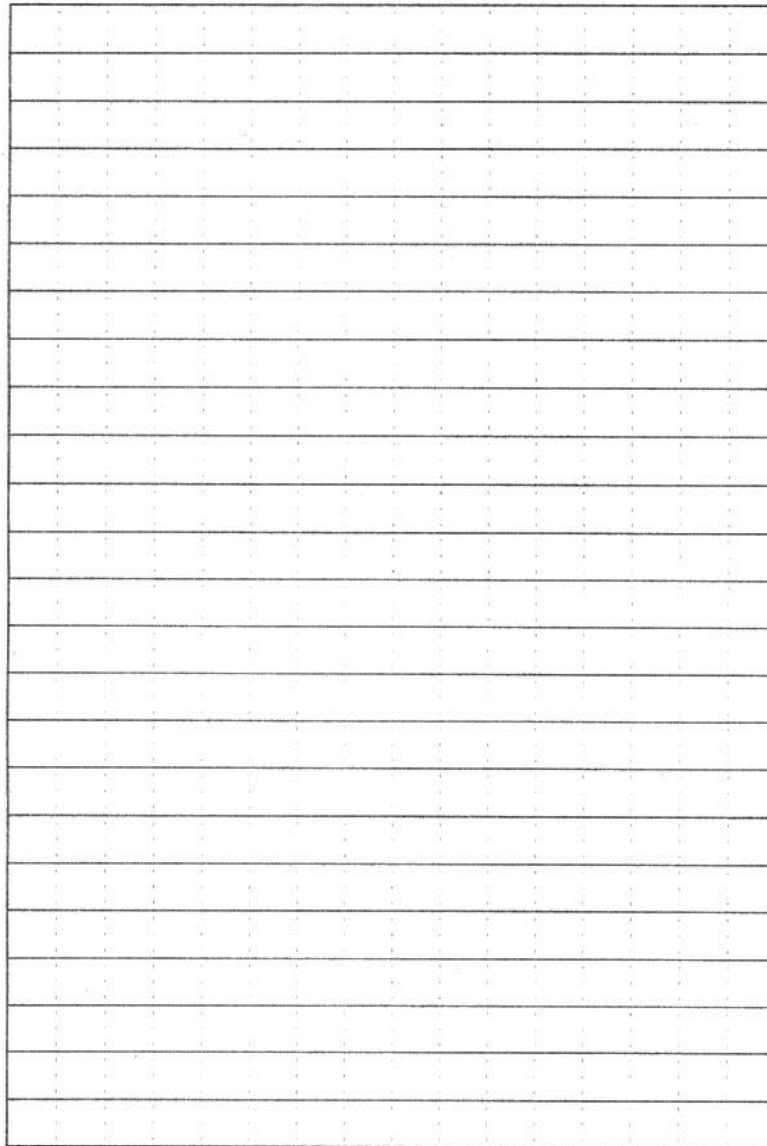
1108 START and EPA demobilize from site

[Signature]

[Signature]

8-23-13

end of
logbook



Scale: 1 square = _____

PermaFix of South Georgia
103 DX 9017.0001.0199



Rite in the Rain.

ALL-WEATHER

UNIVERSAL

Nº 371

Primary Site Manager: Paul Prys
Primary EPA Task Monitor: Chris Russell
Helen Mayoral
Bryan Vasser

1 of 1



11022316

INCH

1

2

3

4

5

6

Rite in the Rain

ALL-WEATHER WRITING PAPER

Name

Address

Phone

Project

Clear Vinyl Protective Slipcovers (Item No. 30) are available for this style of notebook.
Helps protect your notebook from wear & tear. Contact your dealer or the J. L. Darling Corporation

[illegible]

00522

LEGAL DOCUMENT
DO NOT DESTROY

2

Paul Prys & Helen Mayoral

2013-0815 arrived on site at 7:45 am

Perma Fix

leen. notes

- 55 gal. drum into a 500 gal. mixing unit - incident occurred.

- Containment wall leaked, runoff went down small "canal" to ^{tributary of} Creek drainage ditch Mud Creek

- Put out booms a little ways down from "canal" - drainage ditch

- Drainage ditch on South corner of facility

Kendrick of SWS

Carter - believes ~20000 gallon were pumped in the evening. Started pumping ~9:30-10:00pm

- Objectives: use wa meter in tributary & Mud Creek, get some samples as well. Use wa meter on liquid in frack tank, hazcat & sample.

3 people injured

Scale: 1 square =

Mayoral 8/15/2013

4769

Travis Howell - (229) 300 4769
Georgia Petroleum, Inc.
Plant Manager

His observations:

~ 2:30 pm had explosion
~ 5:00 were able to return, fire
out. ^{their (PermaFix)}
Saw valve open and closed it
observed a sheen.

- SWS is GA Petroleum contractor
- HEPACO is contractor for Perma Fix.

- ATF showed up ~ 1500-1600.

- Also on scene, GA EPD Emergency Response, Valdosta Fire Rescue Department, Valdosta Police ^{Mobile Command}

0815 Returned to ER UAW. Calibrated
YSI 556 mps (EPA # A79995)

spec. cond 4.49 ms/cm cel.

pH 7 7.00 (26.07°C)

pH 4 4.00 (27.12°C)

ORP (30°C) 244.5 mV

DO% 100.5 % (24

837.9 mmHg
pressure

Scale: 1 square = ~~1 square~~ 08/15/2012 ^{note in the Rain}

0940 Departed truck for sampling
& collecting samples for
hazcat.

1000 - Sample taken at ~~drainage ditch~~
dammed tributary behind
facility

Location SW of Perma fix
dammed runoff ditch/tributary

Temp: 25.16°C

S. Conductivity 0.591 mS/cm

DO % 84.8 % ~ 6"

pH 5.66 below

ORP 225.5 mV Surface

Notes: Booms with product in it on the
sides and oil pads on water
surface. Oil slick/sheen on
water surface

[Berm was breached during rain storm
overnight]

Mud Creek ^{appears to have} high concentration
of tarsins

Scale: 1 square =

[Signature] 8/15/2013

1020 location 2; ^{reading} ~~sample~~
 taken downstream of confluence
 and of tributary and Mud Creek

Temp 24.98°C

Sp. Cond 0.061 mS/cm

DO % 45.0 %

pH 4.69

ORP 207.9 mV

- Notes: Slight sheen, cloudiness
 on tributary.

1024 location 3 reading taken
 about 20' downstream of
 confluence.

Temp 24.98°C

Sp. Cond 0.061 mS/cm

DO % 46.7 %

pH 4.55

ORP 201.4 mV

* Sample taken from location 2
 at confluence of tributary
 & Mud Creek 1029

5/15/2013

Scale: 1 square =

Rite in the Rain

1035 ~~See~~ Reading taken upstream of
confluence of Mud Creek and
tributary - really dark from tannins.

Temp: 24.98 24.98°C

Sp. Cond: 0.060 mS/cm

DO%: 41.1%

pH: 4.46

ORP: 220.7 mV

78 ^{South}
50 yards from Spur, entry to
Mud Creek (over culverts).

Met with C. Russell at 1140 to debrief
him about the results of the
water quality monitoring and assessment
of site at confluence.

Instructed to ^{get together with HEPACO} take a few samples
from the frack tank and get
readings from them, as well as
run through hazzat. (ignitability).

1150 Gave 3 16oz wide mouth clear
jars to HEPACO to fill 3/4 way with

Scale: 1 square =

~~Amador~~ 8/15/2013

water taken
Samples from the frack tank. (HEPACO-
J.T. Cochran) Sample jars 3, 4 & 5.

OSC
1156 Instructed by C. Russell to calibrate
the AreaRAEs in case of deployment in
the near future.

~~H. Mayoral~~

Calibration

Steel RAE Unit 4, confirmed date & time

Steel RAE Unit 3, confirmed date & time

Unit 4 Steel RAE Calibration

08/15/2013 @ 1250

Mixed Air

Exp. date 10/23/2013 ^{Manuf} date 07/12 Lot #: HAM-413-B

50% LEL (CH₄)

BUMP

Isobutylene

100 ppm

20.9% O₂

Exp. 10/2015

10 ppm H₂S

Lot LTK092-

RR-CM

50 ppm CO

Bump: _____

~~H. Mayoral 8/15/2013~~

Scale: 1 square = _____

Rite in the Rain

Unit 3 Steel RAE Calibration

8/15/2013 1305		
Mixed 10/23/13 exp. Manuf 07/12 HAM 413-8		
50% LEL %	Bump 49%	Isobutylene 100 ppm
20.9 O ₂ %	20.9 %	10/2015 lot # LTK092-RR-CM
10 ppm H ₂ S	10 ppm	Bump: 100 ppm
50 ppm CO	50 ppm	

Unit 1 Steel RAE Calibration

8/15/2013 1325 1635		
Mixed Exp 7/22/14 out 1/2014 LTD 293-RR-CM		
exp 3/2015 Lot # 1472031		
50% Methane % (LEL)	Bump 49% LEL	Isobutylene 100 ppm
18.0% O ₂	17.9% O ₂	exp 10/2015 Lot LTK092-RR-CM
10 ppm H ₂ S	10 ppm H ₂ S	Bump: 101 ppm
50 ppm CO	48 ppm CO	

Last calibrated 08/02/2013

Unit 2 bump tested		Isobutylene 100 ppm
48 % LEL	cal gas 50% LEL (CH ₄)	bump test
17.8% O ₂	18.0% O ₂	96.8 ppm
9 ppm H ₂ S	10 ppm H ₂ S	
49 CO	50 CO	

8/15/2013

Scale: 1 square =

MultiRAE 095-508250 Calibration⁹

Mixed Gas 8/15/2013 1440

Exp. 04/2014 Bump test

Lot#	10 ppm H ₂ S
LTD293-RR-CM	49 ppm CO
10 ppm H ₂ S	49% LEL
50 ppm CO	18% O ₂
50% LEL	
18.0% O ₂	

Isobutylene: 100 ppm

exp. date 10/2015, Lot #: LTK092-RR-CM

Bump test: 99.4 ppm

MultiRAE 095-518698/452

8/15/2013 @ 1453

Exp. 04/2014 Lot # LTD293-RR-CM

10 ppm H ₂ S	BUMP TEST	
50 ppm CO	10	Isobutylene
50% LEL	50	100 ppm
18.0% O ₂	49	exp. 10/2015
	18.0	LTK092-RR-CM
		Bump: 99.8 ppm

~~Amayor 8/15/2013~~

Scale: 1 square = _____

Rite in the Rain

MultirAE Pro (EPA) Unit 37

8/15/2013 1606

Mixed gas cal

10 ppm H_2S

50 ppm CO

Isobutylene

10 ppm

exp. 06/13/2013

#2 11347 ppb

Lot #: 930871

MultirAE Pro (EPA)

(from truck)

Unit 37

8/15/2013 1606

Mixed gas exp. 03/2015

Lot #: 1472031

10 ppm H_2S

50 ppm CO

50% LEL CH_4 (LEL)

18.0% O_2

Isobutylene 10 ppm

exp 06/13/2013 Lot 930871

Bump test: 11347 ppb

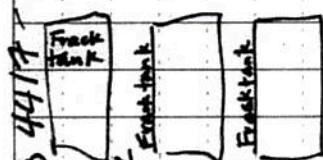
Passed

9.9 ppm H_2S

48 ppm CO

49% LEL

18.0% O_2



Sample 3 4477

Sample 4 26377

Sample 5 4563

Sample 3 had more sediment, 4&5 had time for the sediment to settle out.

9.9 ppm H_2S

49 ppm CO

48% LEL

18.0% O_2

Scale: 1 square =

8/15/2013

At 1655, ~~sample taken~~

At ~1500?

Sample 6

was taken from the area where the explosion took place, on the SE portion of the facility

At ~1655

Sample 7 was taken from a tanker to determine within the facility to hazcat.

~1840 - took sample from the decon line ~~for~~ to test for pH, as requested by OSC C. Russell for HEPACO Captain.

1845 - requested back at 0800 next day and released from site.

19

~~Demolition~~ Left site at 1945

Helen Mayoral

8/15/2013

Scale: 1 square = _____

Rite in the Rain

August 16, 2013

Rysz. Mayoral

0750 START PRYS AND MAYORAL ON-SITE.

Spoke w/ OSC Russell. Will prepare AREARAEs and MULTIRAEs for field use. STRUCTURAL ENGINEER ON-SITE to ~~be~~ ^{be} FOR PERMAFIV to determine stability of OVERHEAD STRUCTURE DAMAGED IN FIRE. AREA LOCATED ON SOUTH END OF BUILDING IN DRUM STORAGE AREA.

0900 START MAYORAL began bump testing

AREA RAEs AND MULTIRAEs. START

PRYS WILL REPLACE THE CO AND H₂S SENSORS WITH HCN AND Cl₂ SENSORS IN UNITS AREA RAE 3 (A80780) AND AREA RAE 1 (A80782) ~~(A80781)~~

A80782

0915 Bump tested AREARAEs

Mixed, exp. 03/2015, Lot #: 1472631

Isobutylene, 100 ppm, exp. 10/2015, LTK892-RR-CM

	UNIT 1	UNIT 2	UNIT 3	UNIT 4
50 ppm CO	42 ppm	62 ppm	49 ppm	46 ppm
100 ppm VOC	101 ppm	97.3 ppm	100 ppm	101 ppm
10 ppm H ₂ S	9 ppm	9 ppm	9 ppm	9 ppm
50% LEL	48%	48%	53%	49%
18.0% O ₂	18.3%	18.0%	17.5%	17.5%

A80782 A80779 A80780 A80781

Scale: 1 square =

~~Manual~~ 8/16/2013

Recalibrated Unit 2, A 80779 using same mixed cal gas as previous bump.

Mixed, exp 3/2015, Lot #: 1472031

50 ppm CO	50 ppm CO	Isobutylene 100 ppm
100 ppm 10 ppm H ₂ S	10 ppm H ₂ S	exp. 10/2015
50% LEL	49 % LEL	Lot #:
18.0% O ₂	18.0 % O ₂	LTK092-RR-CM
	BUMP 5	Bump: 100 ppm

1000 MultiRAE Bump Test 1000

Mixed, exp. 03/2015, Lot # 1472031

Isobutylene 100 ppm, exp. 10/2015, Lot: LTK092-RR-CM

UNIT #:	508250	518698
50 ppm CO	48 ppm	48 ppm
10 ppm H ₂ S	10	11 ppm
50% LEL	51 %	50%
18.0% O ₂	17.9%	17.9%
100 ppm VOC	100 ppm	100 ppm

1100 Prys, ^{prepared to} entered facility with Valdosta Fire Department, ATF, and members of HEPACO

1115 Entered facility

1120 Mayoral tasked to get TWA 1000 FID up and calibrated.

~~Helen Mayoral 8/16/2013~~

Scale: 1 square = _____

Rite in the Rain

1135 Mayoral began calibration of AreaRAE #3 & #1 for HCN & Cl₂ sensors, while TVA warmed up.

HCN cal gas: Exp. 11/2013, Lot #: 3-093-732

Cl₂ cal gas: exp. 10/31/2013, Lot #: D211125 SN: PDI 34897

	^{Bump} Unit 1	^{Bump} Unit 3
10ppm HCN	10ppm	9 ppm
10ppm Cl ₂	Not collected	Not collected

1200 START PAYS RETURNED TO RESPONSE VEHICLE. ASSISTED START MAYORAL WITH TVA1000 CALIBRATION.

1225 START PAYS RE-ENTERED FACILITY TO CONDUCT AIR MONITORING AND ESCORT OSHA, CAEPD, AND PERMA-FLEX INSURANCE ADJUSTERS. START MAYORAL CALIBRATED TVA1000 AND CONTINUED UPLOADING PHOTOS TO EPA OSC WEBSITE. START PAYS MONITORED AIR USING MULTI-RAE PLUS (#095-508250).

BREATHING ZONE MONITORING RANGED FROM 0.4 - 13.2 ppm. LATE NOTE:

AIR MONITORING DURING PREVIOUS ENTRY RANGED FROM 0.4 - 18 ppm. AIR MONITORING IN MIXING UNIT (POINT WHERE DRUMS ARE EMPTIED INTO UNIT)

Scale: 1 square = Mayoral 8/16/2013

August 16, 2013

Pays, Mayoral

1225 resulted in a VOC range of 2.1 - 9.0 ppm with a spike of 45 ppm. VOCs were monitored during both entries. CO, N_2S , and LEL were ϕ and O_2 was 20.9% during both entries. START Pays collected a sample from the mixing unit using a boiler. Sample requested for HAZCAT at request of ATF.

1330 START Pays returned to response truck. Assisted START Mayoral with calibrating/troubleshooting ARGA RAE Cl_2 sensor. OSC Russell arrived to truck and START updated him on-site activities. Contacted QSI Prokoe with troubleshooting Cl_2 sensor. Calibrated ARGA RAE units 1 and 3.

1400 A track hoe with a thumb attachment arrived on-site for HEPACO. HEPACO will use a shear and the track hoe to remove the damaged structural. Also so personnel can work safely. ~~SCPP~~ Shear to be on-site morning of 8/17/13.

Scale: 1 square

Mayoral 8/16/2013

Rite in the Rain

August 16, 2013

Phys, Mangel

1500 Updated logbook and continued updating photos on EPA OSC website.

~~1545 OSC Russell dismissed~~ (RP)

1600 ~~1550~~ BEGAN NAZCAT ON SAMPLE FROM mixing unit. OSC Russell informed START NAZCAT of other samples FROM FRAG TAILS NOT NECESSARY SINCE HEPA LO SENT SAMPLES OFF FOR ANALYSIS.

1645 OSC Russell dismissed START FOR THE DAY. START PACKED UP EQUIPMENT.

1730 START OFF-SITE.

Bob
16 Aug 2013

Scale: 1 square = _____

August 17, 2013

17

Pays, Mayoral

0700 START Pays and Mayoral on-site.

Spoke with OSC Russell. Tasked to deploy AREA RAES 1+3 and to put Cl_2 and HCN sensors in AREA RAES 2+4.

0830 START Mayoral conducted bump test on AREA RAES 1+3. START Pays and OSC Russell walked the site to look for monitoring locations.

Bump test on Steel AREA RAES

Mixed gas exp. 7/2015. Lot # 1A72031

Isobutylene 100ppm. exp date 10/2015. Lot # LTK092-RR-CM

	Unit 1	Unit 2	Unit 3	Unit 4
100 ppm VOC	100 ppm	99 ppm	100 ppm	99 ppm
50% LEL	48%	47%	52%	48%
18.0% O_2	18.0%	18.0%	18.0%	17.5%
10 ppm Cl_2	9.8 ppm		10.1 ppm	
10 ppm HCN	11 ppm	9 ppm	10 ppm	10 ppm

0845 START Pays installed Cl_2 and HCN sensors in AREA RAES 4. Turned unit on to warm sensors.

0930 START Pays and Mayoral deployed units 1+3 on-site. Unit 1 was hung on the

Scale: 1 square = ~~1/4 acre~~ 8/17/2013 in the Rain.

0920 FENCE NEAR THE "NO SMOKING" SIGN
located along the east side of the south
wall on the 6A Petroleum side of the
fence. Unit 3 was hung on the south
side of a trailer (blue) located on
the east side of damaged drum
storage area. ~~5 ft~~

0945 START Pags installed the Cl_2 and HCN
sensors on AREA RAE 2. START Mayoral
calibrated AREA RAE 4

Calibration of HCN & Cl_2 sensors on Unit 2 &
Unit 4 using 10 ppm HCN cal gas, exp. 11/2013,
Lot #: 3-093-732; using Cl_2 cal gas,
exp. 10/31/2013, Batch #: 0211125

Bump test results are listed in Table
on page 17. Chlorine sensors were not
bump tested to conserve low cal gas.

10:15
1020: Unit 4 ~~was calibrated~~ ^{was} deployed
along yellow metal platform on NW
corner of damaged drum storage
area.

1045 Unit 2 HCN & Cl_2 sensors were
calibrated by START Mayoral.

10 ppm HCN cal gas, exp. 11/2013, lot 3-093-732

Scale: 1 square =

~~11 Mayoral~~ 8/17/2013

10 ppm Cl_2 cal gas, exp. 10/31/2013, Batch #211125

Bump test for HCN recorded on Table on page

17. Cl_2 sensor was not bump tested to conserve on low cal gas.

Radio button on Unit 2 was on during calibration and may have been recorded on data log.

1110-1115 Unit START Prys and Mayoral deployed Unit 2. Unit 2 was placed about 20 feet north of the damaged drum storage area on the north side of the silver storage tanker trailer.

1140 START Mayoral took inventory of cal gases. START Prys updated OSC Russell on status of gases, and discussed personnel support. OSC Russell decided only one START was required for site support. START Prys and Mayoral will demobilize from site at ~~1600~~ 1600 today and be replaced by START Vasser.

Mayoral 8/17/2013

Scale: 1 square = _____

Rite in the Rain

8-17-13

- 1300 - Image added to ProRAE Remote for better visualization of air monitoring sites that were deployed along the perimeter and within the facility.
- 1425 - Instructed to change lower alarm limits on the AreaRAEs for VOCs from 5.0 ppm to 50 ppm, by OSC Russell.
- 1500 AreaRAE Host and generator were moved from the response truck to the guard house in front of the facility. There were no issues during the transition.
- START Prys documented the crushing of drums by HEPACO staff.
- 1525 START Prys and Mayoral began packing up response truck.
- 1600 Demobilized from site to transition with START Vasser for personnel change.
- 1930 START Vasser arrives at site and completes a site walk with OSC Russell
- 2015 Demobilize from Site.

James Vasser
8-17-13

8-18-13

0745 Arrive on site and begin bump testing Area Raes.

Unit 4 displayed lamp issues yesterday but cleared out this morning.

Unit 3 was exposed to heavy rain yesterday and did not start up properly. Unit 3 has water inside and was put outside to dry.

0855 Unit 1, 2, 4 pass bump tests / calibrations and are deployed

1000 - Attend Ops meeting

Goal for today is to remove the roof over the receiving area and evaluate unopened drums. Also one drum of concern was identified based on manifests. It contains 4 smaller containers of methyl isocyanate.

1430 Hepaco completes removal of roof

1602 Hepaco enters to evaluate drums in receiving area.

1435 Entry complete and team exits through decon.

1440 Rain begins to move in so Area Raes

Scale: 1 square =

~~1 square~~ *Rite in the Rain*

8-18-13

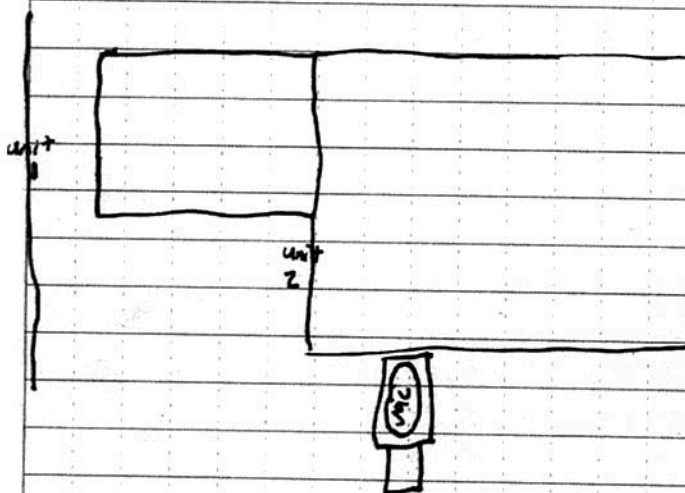
8-18-13

are taken down.

1700 Ops meeting

Area Rec Locations for the day

unit 3



Approximately 15 drums were identified during entry. Goal for rest of afternoon is to crush empty drums and begin opening drums with contents.

1936 Demobilize from site to hotel

~~Page/Name~~ 8-18-13

Scale: 1 square = _____

8-19-13

0740 START arrives at site and begins calibrating 3 Area Racs, 1 MultiRac, and TVA-1000.

Unit #	HCN	VOL	Cat tail	Cl ₂
Area Rac 1				
Area Rac 2				
Area Rac 34				
MultiRac				

TVA 1000 - Methane -

0815 Area Racs placed around receiving area pad

0902 Hepco punches a hole in the suspected isocyanate drum to release any potential pressure

0915 Hepco made entry to evaluate and overpack the suspected isocyanate drum. Hepco confirmed the contents of the drum appeared to match the inventory contents. Hepco overpacks the drum. EPA collects sample from the drum with several ruptured glass containers.

1000 OSC attends Ops meeting

Regan Vane 8-19-13

Rite in the Rain

Scale: 1 square = _____

8-17-13

1000 START attempts to run sample on HazMat I.D. No library match. Drop of sample in water sinks but after shaking leaves a milky solution. After completing cyanide test, negative result. Upon comparing FTIR spectrum to Chlorine shows many similarities but is not an exact match.

1215 START collects water quality parameters

Temp = 32.06 °C	Cond = 8.54 nS/cm
-----------------	-------------------

DO% = 18%	pH = 7.06
-----------	-----------

ORP = 135

FID = 10 ppm

WRP collected from tertiary containment area.

1300 Georgia Power begins working to restore power to Georgia Petroleum.

1730 Georgia Power completes work on-site.

1820 START departs site and refills gas tank and gas can

Dan Vasan

8-19-13

8-20-13

25

0732 START arrives on site and begins preparing Area Raes and multiRaes.

Unit	HCN	VOL
AR1	calcd 10	calcd 100
AR2	calcd 10	calcd 100
AR4	bump 10	calcd 100
MR	bump 10	bump 101

0830 Hepco begins staging drums on receiving pad for popping and sampling

0912 Hepco begins Level B entry to collect samples for Haz Cat'g

0955 START begins running samples on Haz Mat ID

Drum Result

1	Ammonium Chloride	10	oil
2	Oil/Water mix	11	oil/solvent mix
3	Solid - Sandblast Media or	12	Solid - SBM
4	Solid - Sandblast Media	13	Solid - SBM
5	Solid - SBM	14	Latex paint
6	Solid - SBM	15	solid - clay
7	Solid - SBM	16	3 - Hepco - oil
8	Resin		yes/no
9	oil	17	pesticide - (Chlordane)

Scale: 1 square =

By/Name

8-20-13

Site in the Rain

8-20-13

- 11:30 Attend Ops meeting
- 12:00 Attend waste disposal meeting
- 13:00 Hepco collects 2 samples from secondary containment for bench testing. START assists Hepco with bench test for compatibility of drums from receiving area and secondary containment liquids. Drums 1, 2, 3, 8, 9, 10, 11, 14, 15; Receiving Pad liquids and secondary containment liquids were combined in small scale. No reactions were observed. RPID noted no readings FID = 14 ppm max.
- 17:00 Ops meeting
 CTEH will be coming in Wednesday afternoon or Thursday morning
 Sludge can be solidified. Sludge should be sampled beforehand and a bench scale test with fly ash will be conducted.
- 19:00 START departs site following a survey with the TUA. ArcoRe
 VOCs = 0 TUA = 20+ ppm

Scale: 1 square =

ppm Value 8-20-13

8-21-13

27

0730 START arrives on site and
collaborates arrangements

0800 START places Area Raes around
the receiving area pad.

815 Hepco makes entry to over pack
Chloroform drums located in secondary
containment and relatively intact with
legible labels.

Night operations removed most liquid,
debris, and some sludge from receiving
area pad. These cleaning operations will
continue after the chloroform drums
are overpacked.

0930 EPA and START observe sheen
in the tertiary water and ask
RP to place foam at the drain
prior to release. Start collects
WQ parameters

Temp - 27.7°C DO - 28.5%

pH - 7.3 Cond - .405

ORP - 141

1000 Attend START ^{BV} meeting ops meeting

Page 10 of 13

Scale: 1 square = _____

Rite in the Rain

8-21-13

Containers

1000 - 1199 drums impacted

1030 Hepco continues cleaning receiving area pad and crushing drums in secondary containment. Hepco also begins moving drums from secondary containment to roll offs.

1530 EPA takes down Area Raes due to impending rain. The PID is not getting readings but FIDs are so EPA Area Raes will not be set up after the rain.

1700 Attend Ops meeting

1730 Screen receiving pad with FID and discuss monitoring operations with CTEH. FID readings continue to decrease on the pad as they pressure wash. Earlier in the day max of 100 ppm currently max ~ 40 ppm

1845 Screen pad max ~ 20 ppm

2000 START departs site Hepco remains working on decon of the receiving area

Scale: 1 square =

8-21-13

8-22-13

29

0800 START arrives at site and begins site walk.

0840 Discuss operations with Hepaco HHS and learn the pad is currently reading avg ~5 ppm max ~10 ppm. Weather is rainy this morning.

1000 Attend Ops Meeting

1115 START and Hepaco complete a bench ^{scale} ~~test~~ compatibility test using a 5-pt composite of sludge and liquid from secondary containment and fly ash on site. Note no temperature change $> 2^{\circ}\text{F}$ and a rise in FID readings during mixing but not in resting state.

LTEH has 3 Area Raes on South fence line and is making regular surveys with the TVA during site activities.

1230 Hepco begins sheering the roof over secondary containment to open reach to more drains.

~~Page 1 of 1~~ 8-22-13

Scale: 1 square = _____

~~Kite in the Rain~~

8-22-13

1700 Attend Ops meeting.

State requests a memo from PennFix describing the compatibility test similar to what is described in their permit.

1745 START and Hepaco provide technical support to redo the test.

Initial temp - 72°F Initial VOC - 200-500 ppm

Mixing temp - 76°F Mixing VOC - 3000+ ppm

post Mixing temp - 73°F post Mixing VOC - 200-500 ppm

PennFix will prepare a memorandum or checklist describing the results

1800 High Vapor levels are noted throughout the work area when measuring with FID.

The vent of the Vac truck is emitting >500 ppm within 10 ft of vent.

Downwind of Vac truck >50 ppm beyond SE corner of building.

At secondary containment wall = >500 ppm

In excavator ~2-6 ppm during mixing

2000 START departs site

Angela Vassan

8-22-13

Scale: 1 square = _____

8-23-13

0700 START fills gas of truck on way to site.

0705 START arrives at site. Take FID around site. SW corner of containment is approximately 150 ppm. Hepaco will reestablish Level 1 C exclusion zones and try to exhaust the truck vent higher into the air to avoid accumulating on site.

1000 Attend ops meeting

1108 START and EPA demobilize from site

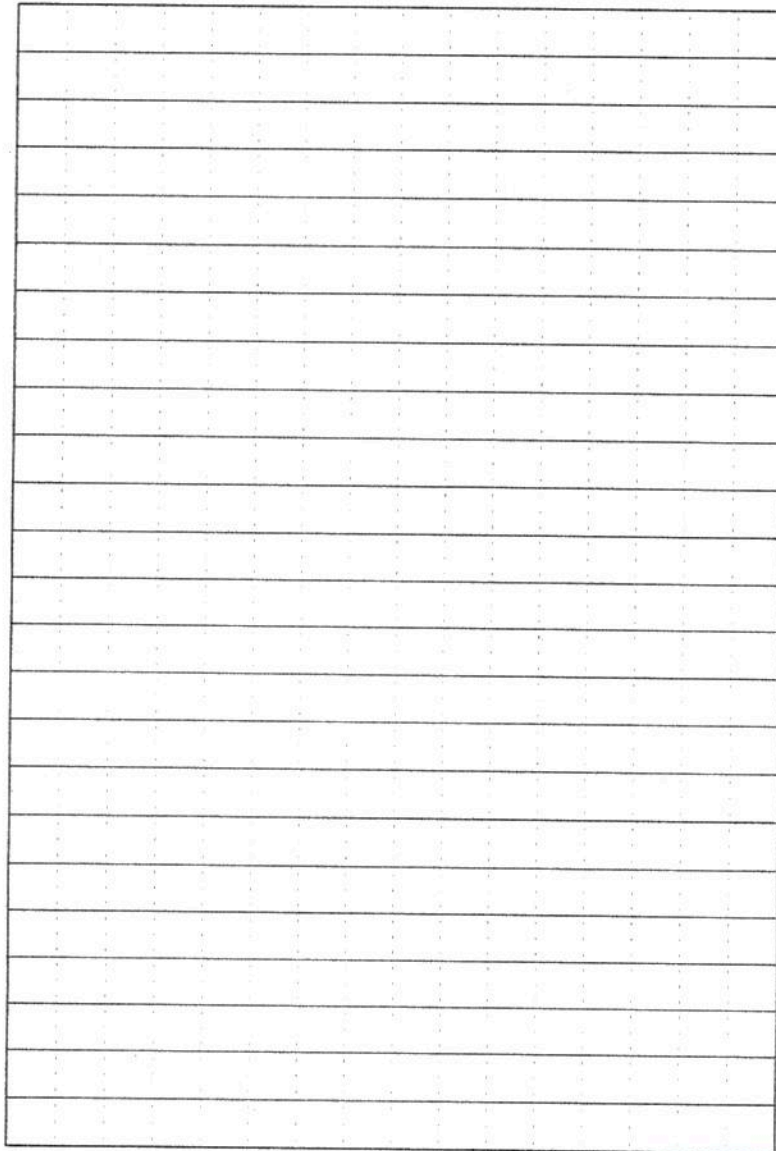
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8-23-13

end of
logbook

Scale: 1 square = _____

Rite in the Rain



Scale: 1 square = _____